

# Appendices

## Appendix A. Methodology

## Appendix B. Data

## Appendix A: Methodology

Our profile of the uninsured and the analyses of coverage gaps and barriers to coverage are based primarily on data collected in the 2000 Washington State Population Survey (hereafter 2000 WSPS). The purpose of this appendix is to describe methods used to develop key constructs for our analysis that are not directly measured in the survey.

### Matching to Other Surveys

We used three other surveys to impute important characteristics for our analyses that were not measured in the 2000 WSPS. These other surveys were the 1998 Washington State Population Survey (for a measure of any period of uninsurance during the year); the 1997 RWJF Washington Family Health Insurance Survey (for a measure of the length of the uninsurance spell in progress); and the 1997 RWJF Employer Health Insurance Survey (for detailed information about the offer of employer health insurance). The imputation involves matching observations in the 2000 WSPS and the host survey based on characteristics common to both.

The longitudinal insurance measures were imputed using a probit regression model that was estimated from the host data set to explain the characteristic in question. Two models were estimated—one for having any period of uninsurance during the year and one for having a spell of uninsurance for one year or more—each of the following form:

$$\text{Probability of having characteristic} = F(Xb),$$

where  $X$  denotes the explanatory variables,  $F$  is the cumulative normal distribution, and  $b$  are the coefficients estimated in fitting the model.

Explanatory variables in these regressions included: age, health status, poverty level, race/ethnicity, education, availability of employer-offered insurance, whether the primary earner was self-employed, and number of earners in the family. For each observation in the 2000 WSPS, we predicted the value of the characteristic as:

$$y = 1 \text{ if } F(Xb + m) > 0.5, \text{ and } y = 0 \text{ otherwise.}$$

The  $y$  values we impute take on the value 1 if the person was uninsured at any time in the last year and 1 if the current uninsurance spell has been in progress for a year or more. The  $X$  are the explanatory characteristics defined above, the  $b$  are the coefficients from the probit model, the  $m$  is drawn from a normal distribution with mean equal to 0 and variance equal to 1, and  $F$  is the standard cumulative normal distribution. This imputation is analogous to reweighting the host data to match the distribution of explanatory characteristics in the 2000 WSPS survey.

Because we wanted to study a number of characteristics about employer-sponsored insurance, we synthetically matched each worker in the 2000 WSPS to an employer in the 1997 RWJF Employer Health Insurance Survey. That is, rather than imputing characteristics of employer-sponsored insurance one by one, we attached all of the characteristics of a single employer to each worker. This process preserves the joint distribution of these characteristics. We assigned workers to employers based on industry, size of the business, the wage mix of the workforce and the business and the worker's wage, and information about whether the household survey respondent worked for an employer that offers

insurance. Employers and workers were assigned to one of 20 industry/size groups. The industry groups were agriculture/forestry/fishing; construction/mining/manufacturing; trade; communications/transportation/utilities; finance/insurance/real estate; professional services; other services; local government; state government; and federal government. All industries except agriculture/forestry/fishing and the government groups were categorized by number of workers in the business: fewer than 10, 10-25, 26-50, and 51 or more. Each of these industry/size groups was classified by the wages of the workers in the business: low-wage businesses—those with two-thirds or more workers earning less than \$10 per hour—and other businesses. A low-wage worker in the 2000 WSPS (i.e. one earning less than \$10 per hour) was probabilistically assigned to an industry/size/type of business on the basis of the reported industry and size of his or her employer and the proportion of low-wage workers in this industry/size group that are employed by low-wage businesses. For example, if 80 percent of all low-wage workers in the “other service” industry who work for a business with fewer than 10 workers are in a low-wage business of this type, then the worker is assigned to a small, other service, low-wage business with probability of .8 and to a small, other service, higher-wage business with probability .2. Within the assigned type of businesses, random selections were made.

For some workers, we have information about whether the employer offers insurance, and we used this to create a subset of the sample including businesses to which a match might be made. For example, if there is a single worker in the family, we know that coverage is available if the worker has employer coverage or reports that it is available. In such case, we would assign the worker only to businesses that offer employer-sponsored insurance (and we recalculate the probability of working for a low-wage or higher-wage business to account for this subset). If there are two workers in the family, and the workers are covered by employer coverage or report that employer coverage is available, we know that at least one of the workers is employed by a business that offers coverage. We assume that a full-time worker at the larger of the businesses is offered coverage in this case and assign that worker to a business that offers employer-sponsored coverage. The other worker in the family can be assigned to a business that offers coverage or to one that does not. If the worker or workers in the family are full time workers and report that coverage is not available, we assume that the employer does not offer coverage and limit our assignment to these businesses. However, if the worker who does not have coverage available is a part-time worker, the worker can be assigned to an employer that offers coverage or one that does not.

The analysis of workers and their assigned employers can be thought of as reweighting the 1997 RWJF Employer Health Insurance Survey using employee weights derived from the 2000 WSPS survey. The distribution of workers according to characteristics of the business to which they are linked is shown in Table 1. We compared the distribution of employees by industry, low-wage versus other business, size of business, and whether insurance is offered by the business using these new weights and the employee weights from the 1997 RWJF Employer Health Insurance Survey. The results were not markedly different.

## **Eligibility for Public Programs**

To analyze access to insurance for the uninsured, we identified uninsured persons who are eligible for public programs based on information in the 2000 WSPS. This coding represents an approximation and an abstraction from the complexity of eligibility rules; our coding is constrained by measures available in the survey. The rules we used for determining eligibility are as follows:

### For children age 18 or younger.

Medicaid: The child is eligible if he or she is a citizen or non-citizen resident in the U.S. five years or more, and adjusted family income is less than or equal to 200 percent of the federal poverty level. Adjusted family income is total family income less \$90 per month per worker in the family less the costs of paid child care per month related to working expenses less child support payments (as reported in the survey). We approximate allowed deductions for child care costs by determining from the survey (1) whether the family reports making child care cost payments and (2) if there is a working adult. If yes, we deduct an amount of child care costs based on the age and county-specific child care cost standards from the Pearce Self-Sufficiency Standard (Pearce & Brooks, 2001).

Children's Health Program: The child is eligible if he or she is a non-citizen and resident less than five years and adjusted family income is less than or equal to 100 percent of the federal poverty level. Adjusted income is determined as described for Medicaid.

CHIP: The child is eligible if he or she is a citizen or non-citizen resident in the U.S. five years or more and adjusted family income is between 200 and 250 percent of the federal poverty level. Although CHIP is not an entitlement, our estimates are that current program funding would be sufficient to cover all uninsured children not otherwise eligible for a public program. Thus, our estimates of eligibility do not take into account capacity limits.

### For adults.

Medicaid: The adult is eligible if there are children in the family and the adult is related to the child, the person is a citizen or non-citizen who has been a resident of the U.S. for five years or more, and adjusted family income is less than or equal to 45 percent of the federal poverty level. Adjusted family income is total family income less 50 percent of earned income less the costs of paid child care per month related to working expenses less child support payments.

State Family Assistance program: The adult is eligible if there are children in the family and the adult is related to the child, the person is a non-citizen who has been a resident of the U.S. for fewer than five years, and adjusted family income is less than or equal to 45 percent of the federal poverty level. Adjusted family income is as described for Medicaid adults.

SSI related programs/GA-U: The person is eligible if disabled, a citizen or non-citizen who has been a resident of the U.S. for five years or more, has own *earned* monthly income of less than \$740 per month and own *unearned* monthly income of less than \$591 per month in area 1 (King, Kitsap, Pierce, Snohomish, and Thurston counties) or \$570 per month in area 2 (all counties except area 1). The incomes are as measured in the survey. We have operationalized *disabled* as reporting having a long-lasting condition such as blindness, deafness, or severe vision or hearing impairment or reporting having a condition that prevents the individual from working for pay.

Medicaid buy-in: The person is eligible if disabled, a citizen or non-citizen who has been a resident of the U.S. for five years or more, is working, has family income of less than 450 percent of poverty, and previously received SSI payments. *Disability* is operationalized as described above. As a proxy for previously receiving SSI payments, we use the indicator that the individual received TANF, GA, or SSI in 1999.

## For adults and children.

Basic Health (BH): Because BH was enrolled at capacity in 2000, we assumed that uninsured individuals did not have access to the program. However, we consider two alternative scenarios: removal of enrollment limits to permit all eligible uninsured persons to enroll in BH, and funding that would allow an additional 50,000 persons to enroll. For this latter case, we probabilistically designate uninsured adults and children who are not otherwise eligible for a public program to allow an additional 50,000 enrollments in BH to represent this scenario.

## Estimating Adjusted Relationships

In many of our analyses we show the simple bivariate relationship between an outcome (such as having insurance) and a characteristic of the individual (such as age) and an adjusted relationship. The simple bivariate relationship shows the effect of the variable under study and all variables associated with it. For example, if older individuals are in poorer health and have lower incomes than younger persons, the bivariate relationship between having insurance and age would also reflect the effect of income on having insurance and the effect of health on having insurance. The adjusted relationship controls for all of the other variables to show the marginal effect of the characteristic under study, in this example, age. To do this, we fit dichotomous models (using logistic or probit regression) to explain the outcome of interest (for example, having insurance) as a function of all characteristics that we think are associated with it. That is, we fit a model of the form:

Probability of having characteristic =  $F(Xb)$ , or

Probability of having characteristic =  $\exp(Xb)/(1 + \exp(Xb))$ ,

where  $X$  denotes the explanatory variables and  $b$  are the coefficients estimated in fitting the model. The  $F$  denotes the cumulative normal function used in fitting the probit model, the second equation is the form of the logit equation.

To measure the adjusted effect of a variable, say age, we use our fitted relationship to predict the outcome for everyone in the population as if they were all young, and we average these predictions to obtain an adjusted measure for the young. This shows what we expect the outcome would be if all the young had the same distribution of other characteristics (say income and health) as the population as a whole. We then predict the outcome for everyone in the population as if they were all old and average these predictions for the adjusted measure for the older population. Again, this shows the expected outcome for older persons if they all had the same distribution of characteristics of the population as a whole. The comparison of these two predicted average outcomes then shows the difference in the outcome for the young and old after controlling for all other factors.

We fit models to examine the adjusted effects of demographic characteristics on the probability of being uninsured among all persons (Chapter 2), of family characteristics on the probability that a child is uninsured (Chapter 3), and on the percent of workers in firms offering health insurance (Chapter 4). The variables that we control for to study the probability of being uninsured are: family income, race/ethnicity, age, citizenship, region of residence, number of workers in the family, health status, and education. The variables that we control for to study the role of family characteristics in whether the child is uninsured include: whether the parent is uninsured, whether the parent is a single female, the child's age, and the family income.\* The explanatory variables that we control for in studying the

\* We do not include race/ethnicity, region, citizenship, or work status of the parents, but rather, the effects of these variables are reflected in the role of the parent's insurance status on the child's state.

probability that an employee is in a business that offers insurance include: size of firm, whether the business is seasonal, whether the firm employs predominantly part-time workers, whether the business has unionized workers, whether the business employs predominantly young workers, whether the business employs predominantly female workers, and whether the business employs predominantly low-wage workers.

## **Index of Access to Affordable Coverage**

We developed an index of affordability for each sample person and family in the survey. The goal of this effort was to assess how many uninsured families have access to affordable coverage and the characteristics of the uninsured that do and do not have such access. Thus, this differs somewhat from the purpose of the affordability analysis, which measures the income needed for a typical family to afford various types of coverage in the state. Our procedures and assumptions in general, however, follow those described in the affordability analysis (See Research Deliverable 3.3, *Income Adequacy and the Affordability of Health Insurance in Washington State*). We modified some of the affordability analysis methods to incorporate specific information we had about each individual and family from the survey that cannot be accounted for in looking at an average, or typical, family. We detail these differences below.

We linked the Pearce Self-Sufficiency Standard (Pearce & Brooks, 2001) to each family in the 2000 WSPS survey based on the family composition and the county of residence. The Pearce standard is developed for 70 distinct family types based on the age and number of adults and the age and number of children in the family. The 70 types consider all possible family configurations with up to three children.\* For families with more than three children, we calculated the marginal cost per child in each of the four age groups considered in the Pearce model (infant, preschooler, school age, teenage) based on the difference in cost for a two-adult family with two children in the age group and a two-adult family with one child in the age group. This marginal cost per child of a given age was then used to increment the standard to account for families with more than three children. We use the Pearce model to measure the family needs for all non-health related expenses. Because the 2000 WSPS survey was taken in 2000, we adjusted the Pearce standard from 2001 to 2000 dollars using the consumer price index for all urban areas.

Premium costs for the best (least cost) option available to the individual or family were then calculated as follows:

For those eligible for Medicaid, CHIP, GA-U of SSI-related programs, Children's Health Program, and State Family Assistance programs, the individual cost for insurance is set to zero.

For all other individuals, we establish a premium for the family based on the best (most affordable) option for each family member. For those eligible for BH, premiums are based on the sliding income scale for the lowest premium plan. We use the lowest premium plan, as was assumed in the analysis reported in Research Deliverable 3.3. However we account for the variation in BH premiums facing families at lower and higher income levels in our calculations by using income reported in the survey, and the BH premium schedule to calculate the cost for each person eligible for BH. Our analysis of the affordability index considers two BH funding scenarios: in one scenario enrollment is capped at

---

\*In contrast, the analysis of income adequacy and affordability described in Research Deliverable 3.3 focused on 12 representative family types from the 70 used to calculate the self-sufficiency standard.



current levels, and so those currently uninsured would be unable to join (and so are deemed ineligible). Thus, BH is not considered an option available to the uninsured, and so BH premiums are not considered in measuring the affordability index for the uninsured. In the other scenario, funding levels would accommodate all those who are nominally eligible, given the BH eligibility criteria, and so the BH premiums factor into the affordability index for the uninsured, if it represents the lowest cost plan available.

For those who have access to an employer health plan, we used the employee's share of the cost for self-only coverage or family coverage, as appropriate, using the required contributions from the 1997 RWJF Employer Health Insurance Survey and linking workers in the family to an employer (as described earlier). These premiums were adjusted to 2000 dollars, using the medical component of the consumer price index. We used this specific detail, rather than average costs for a small employer assumed in the analysis described in Research Deliverable 3.3, because we want to account for differences in premium costs and employer contribution shares across business sizes and industry.

For persons who are not eligible for a public insurance program and do not have access to employer-sponsored coverage, we used a premium schedule for the purchase of either individual insurance or WSHIP insurance. The premium schedules vary by the age and number of adults in the family purchasing in this market and by the size of the family and accord with the premiums for this program assumed in the affordability analysis. Persons reporting that they are in fair or poor health are given a WSHIP premium; others are given the individual market premium. Current tax law permits self-employed persons to deduct up to 50% (in 2000) of the cost of their individual health insurance premiums, even if they do not otherwise itemize deductions. This effectively lowers the price of insurance to  $.5 * \text{Premium} + (1 - \text{marginal tax rate}) * .5 \text{ Premium}$ . We used information on marginal tax rates for single-person families and other families by level of total family income from the U.S. Statistical Abstract to make this adjustment for the premiums for self-employed persons and their family members.

To accord with the affordability analysis, we assumed three different health statuses, and we adopted levels of total spending and out-of-pocket spending that are consistent with the affordability analysis. The healthy in our analysis are those who report health status of excellent: they are assumed to have no medical care costs.\* Those in average health are those reporting health status to be very good or good (this includes those whose health is the 40<sup>th</sup> to 90<sup>th</sup> percentiles of the distribution). The sick are those who report health to be fair or poor. We assume a total level of annual insured spending for health care services in 2001 dollars for those in average health as follows:

Under age 19:	\$1471
Age 19-25:	\$2254
Age 24-34:	\$2724
Age 35-44:	\$3165
Over age 44:	\$5494

---

\* We limited the "healthy" to those reporting their health as excellent because about 40 percent of persons self-report excellent health. While the proportion of the population with no health expenses in a year (our definition of "healthy") is smaller than 40 percent, we do not have a more detailed set of health categories on which to base our three subgroups.

These total spending assumptions accord with the out-of-pocket spending and cost-sharing assumptions for individual coverage in the affordability analysis. We assume the sick have total spending that is three times this level.\* We adjust the 2001 dollars to 2000 dollars, using the medical component of the consumer price index for our affordability index for persons in the 2000 survey.

To determine out-of-pocket spending for those with access to employer coverage, we use measures of the actuarial value of the plan offered by the employer to which the workers in the family are linked. The actuarial values are measures that were developed for each plan offered by employers in the 1997 RWJF Employer Health Insurance Survey based on detailed information about the plan benefits. Again, we do this in order to take account of differences in benefits offered by large and small employers and across industries. The actuarial value is an estimate of the share of medical spending that would be reimbursed by the plan; the individual's out-of-pocket share is one minus the actuarial value. This latter share is then multiplied by spending to determine out-of-pocket payments for health services. For the person in average health, we use the actuarial value for the average person. For the sick person, we use the actuarial value for persons in the top 25 percent of the expenditure distribution in order to take into account a higher expected actuarial value as spending increases because of the lower weight of deductibles and because of out-of-pocket limits on spending.

For all other plans, we used the same assumptions employed in the affordability analysis described in Research Deliverable 3.3.

Our index of affordability is then measured as follows: For individuals eligible for Medicaid, CHIP, GA-U of SSI-related programs, Children's Health Program, and State Family Assistance programs who do not have premium payments or out-of-pocket cost sharing, the affordability index is set to 1. For all other persons, we compare the Pearce monthly requirements for non-health spending for the family plus the monthly family premium payments for the best option available to family members plus the average monthly out-of-pocket payments for all family members to the family's monthly income. If family income is greater than the monthly requirement for non-health spending and health spending, then the index is set to 1; otherwise, it is set to zero.

To illustrate the calculation for some prototype cases: suppose we have a married couple, both aged 35-44, living in Spokane County, with an annual income of 207 percent of the federal poverty level, or \$24,000. The husband is employed and offered insurance for which he would have to contribute \$300 per year for self-only coverage and \$1000 per year for family coverage. Assume both are in excellent health. The least-cost health care option available to this family would be the employer plan. So the cost to the family for premiums annually is \$1000 and the out-of-pocket cost for medical services is \$0. The Pearce monthly requirement for non-health spending for this family is about \$19,700. Thus, the requirements for non-health spending plus the health insurance premium payments and out-of-pocket medical services spending by the family equals \$20,700, which is below the family income. Each person in the family receives an affordability index of 1.

Suppose instead that the wife is in poor health and the insurance policy has an out-of-pocket maximum for the year of \$1000. In this case, premiums plus out-of-pocket health care spending for the year are \$2000; but the requirements for health care and non-health care of \$21,700 remain below the

---

\* This assumption is based on actuarial consultation. In practice, this assumption does not affect our basic measure of the affordability index for most people since out-of-pocket spending for services by the sick will depend on the cap on spending in the lowest-cost health plan. It does enter our alternative calculation that accounts for what people would pay for services without insurance, described later.



family income and the affordability index is 1.

Now assume that the husband's employer does not offer insurance. In this case the family must purchase in the individual insurance market. Since the wife is a high-risk person (her health is poor), her best option is WSHIP at an annual premium of \$2170 (see the assumptions reported in Research Deliverable 3.3). Her out-of-pocket spending for medical care is \$1500. The husband, however, can purchase individual insurance at an annual premium cost of \$1728, and he incurs no expenditures for medical care services. Their health care spending needs are thus \$5398 ( $\$1500 + \$1728 + \$2170$ ). In this case, the requirements for health and non-health spending of \$25,098 ( $\$19,700 + \$5398$ ) exceed the family income of \$24,000, and so the affordability index for each person is set to 0.

Finally, for this latter case, assume the wife is disabled with no earnings and no unearned income. She is eligible for insurance coverage through SSI-related programs. The husband can purchase individual coverage at a cost of \$1728, as above, and has no out-of-pocket costs of care. Her index is set to 1, since we assign an insurance affordability index of 1 to all persons who have access to coverage at no premium and with no cost-sharing requirements. The requirements for health and non-health spending for the family are \$21,428 ( $\$19,700 + \$1728$ ) and are below the family income of \$24,000. Thus, the husband's affordability index is also set to 1.

The affordability index is not an index of likelihood of purchase because it does not account for other priorities of the family, risk aversion, or attitudes about health insurance or health care. Nonetheless, it does discriminate quite well between those who do and do not have coverage; among those who purchase insurance, 91.5 percent are measured to have access to affordable coverage. Among the uninsured, only 58.5 percent are measured to have access to affordable coverage (including public insurance).

The index looks at whether family income is sufficient to cover non-health care and health care resource requirements given the best insurance option. However, it does not take into account that individuals are likely to incur medical costs even without insurance, and so their direct payments for medical care may be lower with insurance; they may have more income left to pay for other needs. Therefore, we also looked at a variant of the index in which we measure the cost of insured health care as the premium less any savings in out-of-pocket spending from purchasing insurance. We then compared the Pearce standard for non-health care plus the cost of insured health care to the family income. This index requires a measure of expected payments for medical care if uninsured. To obtain this, we assumed that spending by the uninsured is 75 percent of insured spending; this is based on a large body of literature that looks at differences in use by the insured and uninsured. This literature obtains a wide range of estimates, but 75 percent represents a reasonable mid-range of the estimates. We also assumed that a family would not pay more than 25 percent of its income out-of-pocket for care, even if uninsured; if incurred expenditures exceed this amount, the family is assumed to seek charity care. In the aggregate, our conclusions are not very sensitive to the use of this alternative measure. Using the alternative measure, 61.4 percent of the uninsured have access to affordable coverage, in contrast to the 58.5 percent mentioned above. However, as we would expect, taking into account the savings in out-of-pocket payments in our measure does affect differences in affordability by health status, as reported in Chapter 6.

## **Estimating Supply Premiums for Workers not Offered Insurance**

We are interested in looking at whether workers in businesses that do not offer health insurance face higher premiums for group coverage than workers in businesses that do offer coverage. We do not

observe these premiums directly, but we can estimate the supply premium based on data about premiums paid for workers in businesses that do offer coverage and how those premiums vary with characteristics of the business and its workers. We assume that premiums are given by the relationship:

$$\text{Premium} = Zg + e.$$

If we know this relationship, we can then impute premiums that would have to be paid for workers in businesses that do not offer insurance.

However, because we only observe premiums for those who offer insurance, if we estimate this relationship on the data available to us, we must take into account the potential selection bias; the equation can not typically be consistently estimated using ordinary least squares. But consistent estimates of  $g$  can be obtained using the two-stage estimation procedure suggested by Heckman (1979). For the two-stage procedure, we first estimate the selection equation that distinguishes those who do and do not offer insurance as a probit model given by:

$$\Pr(\text{Offer Insurance}) = \Pr(Xa + \text{Premium}b > u) = \Pr(Xa + Zgb > h) = F(Xa + Zgb),$$

where the  $X$  are characteristics that are assumed to directly affect the decision to offer insurance and the  $Z$  are characteristics that affect premiums (and some may also be in the  $X$  vector),  $u$  has the normal distribution and  $h = u - be$ . Conditional on offering insurance and observing premiums, the premium equation is:

$$(\text{Premium} | \text{Offer Insurance}) = Zg - d[f(W)/F(W)] + v,$$

where  $W = Xa + Zgb$ ,  $-d[f(W)/F(W)] = E(e | \text{Offer Insurance})$ ,  $d = \text{cov}(eh)$ , and  $E(v)=0$ . The two-stage estimation procedure involves fitting the reduced selection equation to obtain estimates of  $W$ , which are used along with the observed  $Z$  to estimate  $g$  and  $d$  in the premium equation. To estimate the equations, we assumed the following variables are in the  $X$  vector (that is, they directly affect the offer of insurance): industry, firm size, the age mix of workers, whether union employees, the gender composition of workers, the work hours composition of employees, whether a seasonal business, and the amount of turnover in the workforce. Characteristics assumed to affect premiums but not the offer include the number of years in business and whether ever denied coverage.

We then estimate predicted premiums for those not offering insurance as:

$$\text{Premium} | \text{Doesn't Offer Insurance} = Zg^* + d^*[f(W^*)/\{1-F(W^*)\}] + v,$$

where  $v$  is drawn from a normal distribution with mean 0 and variance and is estimated as the residual variance from fitting the premium equation. For a further discussion of this technique for estimating offer premiums, see Marquis & Louis (2001).

## References

1. Heckman, J.J. (1979) Sample selection bias as a specification error, *Econometrica*, 47 (1), 153-161.
2. Marquis, M.S. & T.A. Louis, (2002) On using sample selection methods in estimating the price elasticity of firms' demand for insurance, *Journal of Health Economics*, 2, 137-145.
3. Pearce, D. B. and Brooks, J. (2001) *The Self-sufficiency Standard for Washington State*, Washington Association of Churches, Seattle WA.

**Figure A-1. Distribution of Workers in Washington, 2000 by Characteristics of Business**

Characteristic of business	All business	Low wage business (a)	Other business (b)	Small business (c)	Large business (d)
<b>Size of firm</b>					
Fewer than 10 workers	22.0	30.4	19.9	51.2	0.0
10-50	21.0	24.7	20.1	48.8	0.0
More than 50	57.0	44.9	60.0	0.0	100.0
<b>Low-wage business</b>	20.0	100.0	0.0	25.6	15.7
<b>Other business</b>	80.0	0.0	100.0	74.4	84.3
<b>Employs mostly part-time workers (e)</b>	5.6	11.3	4.2	7.5	4.3
<b>Employs mostly full-time workers</b>	94.4	88.7	95.8	92.5	95.7
<b>Seasonal business (f)</b>	5.4	9.4	4.4	4.7	5.8
<b>Not seasonal</b>	94.6	90.6	95.6	95.3	94.2
<b>Has union workers</b>	27.5	4.6	66.8	4.3	45.1
<b>No union workers</b>	72.5	95.4	33.2	95.7	54.9
<b>Employs predominantly young workers (g)</b>	22.3	41.5	17.5	27.4	18.5
<b>Other business</b>	77.7	58.5	82.5	72.6	81.5
<b>Employs mostly female workers (h)</b>	7.1	17.8	4.4	9.1	5.6
<b>Other business</b>	92.9	82.2	95.6	90.9	94.4

(a) at least 2/3 of workers earn less than \$10 per hour

(b) fewer than 2/3 of workers earn less than \$10 per hour

(c) 50 or fewer workers

(d) More than 50 workers

(e) at least half work fewer than 20 hours per week

(f) at least half of workers are temporary or seasonal

(g) more than 30 percent of workers are less than age 30, no workers older than 50

(h) at least 90 percent of workers are female

## Appendix B. Data

**Figure B-1. Counts of Insured and Uninsured Persons Under 65 in Washington, 2000**

(in thousands)			
Characteristic	Uninsured	Insured	Total
<b>All persons under 65</b>	484.4	4756.4	5240.8
<b>Age of person</b>			
Under 19	115.8	1503.7	1619.5
19-34	210.1	1059.5	1269.6
35-54	127.2	1692.3	1819.5
55-64	31.3	500.9	532.2
<b>Family income</b>			
100% FPL and below	164.7	578.6	743.3
101-200%	143.4	611.9	755.3
201-300%	71.5	712.1	783.6
301-400%	51.1	710.5	761.6
401% and higher	53.7	2143.3	2197.0
<b>Race/ethnicity</b>			
White, non-Hispanic	324.4	3854.5	4178.9
Black, non-Hispanic	18.6	172.2	190.8
Hispanic	87.0	298.5	385.5
American Indian/Alaska Native	35.5	91.6	127.1
Asian/Native Hawaiian	18.9	339.6	358.5
<b>Citizen</b>			
Citizen	423.6	4565.0	4988.6
Non-citizen	60.8	191.4	252.2
<b>Gender</b>			
Male	279.7	2377.1	2656.8
Female	204.7	2379.3	2584.0

*Figure B-1 continued*

Source: 2000 Washington State Population Survey.

**Figure B-1. Counts of Insured and Uninsured Persons Under 65 in Washington, 2000 (continued)**

<b>Characteristic</b>	<b>Uninsured</b>	<b>Insured</b>	<b>Total</b>
<b>Health status</b>			
Excellent/very good	246.3	3401.1	3647.4
Good	180.8	1033.3	1214.1
Fair/poor	57.3	322.0	379.3
<b>Number of workers in the family</b>			
None	119.3	524.9	644.2
One	284.9	2183.6	2468.5
Two or more	80.2	2047.9	2128.1
<b>Employment status of workers in family</b>			
Unemployed or not in labor force	119.3	524.9	644.2
Have access to employer coverage	84.6	3632.3	3716.9
Employer coverage not available	111.9	335.8	447.7
Self-employed	168.6	263.4	432.0
<b>Region</b>			
Clark	20.5	294.0	314.5
Other Puget Metro	116.5	1457.6	1574.1
King	130.7	1427.8	1558.5
Spokane	32.8	332.8	365.6
West Balance	39.4	310.8	350.2
Yakima/Tri-Cities	44.1	328.3	372.4
North Puget	38.4	272.0	310.4
East Balance	62.0	333.1	395.1
<b>Education (for persons 19 and older)</b>			
Less than high school	81.3	232.4	313.7
High school degree	149.0	945.8	1094.8
Some college	91.4	946.8	1038.2
College degree	47.0	1127.7	1174.7

Source: 2000 Washington State Population Survey.

**Figure B-2. Counts of Insured and Uninsured Children in Washington, 2000**

(in thousands)			
Characteristic	Uninsured	Insured	Total
<b>All persons under age 19</b>	115.8	1503.7	1619.5
<b>Parent's insurance status</b>			
Insured	30.0	1463.3	1493.3
Uninsured	85.8	40.4	126.2
<b>Family Income</b>			
200% FPL and below	76.0	465.9	541.9
Above 200% FPL	39.8	1037.8	1077.6
<b>Age of child</b>			
Under 6	43.1	490.5	533.6
6-11	30.9	461.3	492.2
12 or older	41.8	551.9	593.7
<b>Family head</b>			
Single female	28.9	268.1	297.0
Single male, or two-parent family	86.9	1235.6	1322.5

Source: 2000 Washington State Population Survey.

**Figure B-3. Counts of Uninsured by Insurance Eligibility, Under Age 65 in Washington, 2000**

(in thousands)	
Characteristic	Number of uninsured
<b>Adults (19 and older)</b>	
Eligible for public coverage	43.9
Eligible for employer coverage	51.4
Eligible for public and employer coverage	11.0
Not eligible for public or employer coverage	262.3
Total Adults	368.6
<b>Children (under 19)</b>	
Eligible for public coverage	73.7
Eligible for employer coverage	7.6
Eligible for public and employer coverage	14.5
Not eligible for public or employer coverage	20
Total Children	115.8

Source: 2000 Washington State Population Survey.